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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,312

06/30/2006

Franz Kuttner

1890-0314

8037

50255 7590 04/12/2007
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EXAMINER

NGUYEN, KHAI M

ART UNIT

PAPER NUMBER

2819

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/564,312

Applicant(s)

KUTTNER, FRANZ

Examiner

Khai M. Nguyen

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/30/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 10-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/11/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 01/11/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. An initiated copy of the information disclosure statement (IDS) submitted on 01/11/2006 is attached herewith.

Specification

2. The continuation data should be added to the specification (i.e., first paragraph of the specification).
3. The application has not been checked to the extent necessary to determine the presence of all possible typographical and grammatical errors. However, Applicant's cooperation is requested in correcting any errors of which he/she may become aware in the application.

Drawings

4. Fig. 1 is objected to because blocks 10 and 16 are not labeled. Blocks 10 and 16 should be labeled as "Dynamic element matching" and "Decoder", respectively. Clarification is required.

Claim Objections

5. Claims 10, 12, 16, 18-19, 25-26, and 29 are objected to because:

Claim 10, line 6, "DEM" is introduced for "Dynamic Element Matching" without being defined as such. At line 8, "the array cells" should be changed to --the array arrangement--. At line 9, "...the arithmetic sign signal..." should be changed to --...the at least one arithmetic sign signal... --. At lines 12-13, "...the at least to digital output

data items and the arithmetic sign signal..." should be changed to "...the at least one arithmetic signal and **two** digital data items..."-- Correction and clarification is required.

Claims 12 and 18 are objected to because they directly or indirectly depend from claim 10.

Claim 16, line 3, "second **two**" should be changed to --second **row**--. Correction is required.

Claim 19, line 5, "DEM" is introduced for "Dynamic Element Matching" without being defined as such. At line 7, "the array cells" should be changed to --the array arrangement--. At line 8, "the arithmetic sign signal" should be changed to -- the at least one arithmetic signal--. At lines 11-12, "...the at least **to** digital output data items and the arithmetic sign signal..." should be changed to "...the at least one arithmetic signal and **two** digital data items..."-- Correction and clarification is required.

Claim 25 is objected to because they directly or indirectly depend from claim 19.

Claim 26, last line, "DEM" is introduced for "Dynamic Element Matching" without being defined as such. Correction and clarification is required.

Claim 29 is objected to because they directly or indirectly depend from claim 26.

Allowable Subject Matter

6. Claims 10-29 are allowable if the objections above are overcome. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 10-25, the references of record neither anticipate nor render obvious the recited combinations including: the local decoder device that

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receives a plurality of row and column activation signals; and the dynamic element matching (DEM) logic device that generates at least one arithmetic sign signal and two digital output data items from digital input data on the basis of a predetermined DEM algorithm in order to determine an initial cell and a final cell in the array arrangement having energy sources which are to be activated, the at least one arithmetic sign signal determining whether cells adjoining the first cell in the array arrangement are activated if the cells to be activated reach the last cell in the array arrangement.

With respect to claims 26-29, the references of record fail to teach or suggest the recited combination including the control circuit that generates a plurality of row and column actuation signals and provides the generated row and column actuation signals to the local decoder device of the array arrangement, wherein the row and column actuation signals configured to cause the array arrangement to activate energy sources of a set of cells defined by an initial cell and a final cell, the initial cell and final cell determined on the basis of a predetermined dynamic element matching algorithm.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571-272-1809. The examiner can normally be reached on 9:00 - 5:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford (Rex) Barnie can be reached on 571-272-7492. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



April 2, 2007

Khai M. Nguyen
Art Unit: 2819
571-272-1809